

Title (en)
POLYMER DISPERSIONS OF NARROW PARTICLE SIZE DISTRIBUTION

Title (de)
POLYMERDISPERSIONEN MIT ENGER TEILCHENGROSSENVERTEILUNG

Title (fr)
DISPERSIONS POLYMÈRES AYANT UNE DISTRIBUTION ÉTROITE DES TAILLES DE PARTICULES

Publication
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Application
EP 09748348 A 20091110

Priority
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Abstract (en)
[origin: WO2010055019A1] A process for the manufacture of a polymer dispersion comprising the steps of i) providing a mixture comprising from 2 to 60 parts by weight of a first polypropylene polymer having sufficient carboxylic acid and/or carboxylic acid anhydride groups equivalent to an acid value of from 2 to 50 mg KOH/g nv polymer and from 40 to 98 parts by weight of a second polymer having a molar excess of functional groups capable of reacting with the carboxylic acid and/or carboxylic acid anhydride groups of the polypropylene ii) causing the polymers to melt at a chosen temperature under conditions of high shear in an extruder to form an intimate mixture of the polymers iii) causing some of the carboxylic acid and/or carboxylic acid anhydride groups of the polypropylene to react with at least some of the functional groups of the second polymer to form a reaction mixture, under conditions of high shear in an extruder iv) rapidly cooling the reaction mixture outside the extruder to form a solid product v) optionally breaking up the solid product into smaller pieces vi) contacting the solid product with an organic liquid wherein the organic liquid is chosen to be a good solvent for the second polymer and a poor solvent for the polypropylene polymer whereby a dispersion comprising polypropylene particles in a solution of the second polymer dissolved in the organic liquid is formed.

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